

Patent Application of Gary R. Fisher for " Water Wall Assembly
For Generating Dynamically Changing Water Patterns" continued

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CLAIMS: I Claim:

1. A water wall assembly for generating decorative flow patterns,
comprising:

a. a translucent front sheet having a substantially planar front side
disposed toward a viewing space and having a rear side comprised of a
multiplicity of concave depressions, said depressions for providing a patterned
viewing screen when viewed from the front of said front sheet, said multiplicity of
concave depressions further providing a multiplicity of liquid flow pathways for
forming decorative water patterns;

b. a rear sheet disposed behind said front sheet with front side disposed
toward said multiplicity of concave depressions, for providing a contrasting
background visible through said front sheet;

c. side edge means fixidly disposed at the sides of said front sheet and
said rear sheet for holding said front sheet and said rear sheet in fixed relation to
one another, wherein said front sheet and said rear sheet are parallel and
oriented vertically and wherein the rear side of said front sheet comprised of said
multiplicity of concave depressions and the front side of said rear sheet have
means defining an irregular channel for the flow of liquid;

d. means defining a first opening at the top of said channel for providing an entry opening for an input flow of liquid into said channel;

e. means defining an second opening at the bottom of said channel for providing an exit opening for an exit flow of liquid from said channel;

f. supply means for generating a variable flow of liquid; and

g. delivery means for transporting said variable flow of liquid from said supply means to said first opening at the top of said channel, for providing a variable flow of liquid in said channel of said water wall assembly.

2. The water wall assembly of Claim 1, wherein said rear sheet is opaque.

3. The water wall assembly of Claim 1, wherein said rear sheet is translucent.

4. The rear sheet of Claim 3, wherein said rear sheet is rear illuminated.

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5 5. The water wall assembly of Claim 1, wherein said concave depressions
6 are hemispherical.

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9 6. The front sheet of Claim 1 wherein said multiplicity of concave
10 depressions are disposed in a grid, wherein each grid element has equal sides.

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13 7. The grid of Claim 6, wherein each said grid element is oriented with the
14 vertices of said sides oriented vertically.

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17 8. The water wall assembly of Claim 1, wherein the rate of said flow of
18 liquid is time varying between the limits of zero and a maximum defined as the
19 rate of said flow of liquid required to completely fill said channel.

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22 9. The water wall assembly of Claim 1, wherein said supply means is a
23 computer-controlled pump.

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26 10. The supply means of Claim 1 wherein said flow of liquid is controlled
27 by a pre-programmed computer.

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11. The water wall assembly of Claim 1, wherein the rear side of said front sheet and the front side of said rear sheet are separated by a distance substantially equivalent to the thickness of said front sheet.

12. The translucent front sheet of Claim 1 wherein the percentage of light transmission is between 70% to 100%.

13. The water wall assembly of Claim 1, wherein said translucent front sheet is acrylic.

14. The water wall assembly of Claim 1, wherein said translucent front sheet is styrene.

15. The water wall assembly of Claim 1, wherein said translucent front sheet is polyester resin

16. The water wall assembly of Claim 1, wherein the rear side of said front sheet and the front side of said rear sheet are in substantial and fixed contact.

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5 17. A water wall assembly for generating decorative flow patterns,
6 comprising:

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8 a. a translucent front sheet with an essentially planar front side and a rear
9 side having a multiplicity of concave depressions for providing a multiplicity of
10 liquid flow pathways;

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12 b. a rear sheet disposed behind said translucent front sheet with means
13 defining a pathway for liquid to flow in the region defined between the rear side of
14 said translucent front sheet and the front side of said rear sheet, for providing a
15 contrasting background visible through said front sheet;

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17 c. means defining an opening at the top of said pathway for an input of
18 liquid between the two sheets from the top of said pathway to an opening in the
19 bottom of said pathway;

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21 d. means defining an opening at the bottom of said pathway for an output
22 of liquid; and

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24 e. supply means for generating a variable flow of liquid to said top of said
25 pathway.